AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Please replace the paragraph bridging pages 4 and 5, starting on line 16, with the following new paragraph.

The vision system for inspecting the UV recoat generally includes a camera and an autofocus unit. In the particular configuration shown in Figure 2a, the vision system has two cameras, a top camera 102 mounted above a fiber 112 to be inspected and a bottom camera 104 mounted below the fiber 112 to be inspected. The fiber 112 is held by a metrology frame, the details of which are set forth in commonly assigned, co-pending U.S. Patent Application Serial No. 09/048,331 filed March 26, 1998 entitled "Apparatus for Integrating Steps for a Process for Interconnecting Optical Fibers", which issued as U.S. Patent No. 6,122,936 on September 26, 2000, which is hereby incorporated by reference in its entirety for all purposes. An autofocus unit 108 automatically adjusts the focus of each camera after the fiber has been translated. The top camera 102 is preferably mounted horizontally and a prism 106 or other redirecting element provides the image from the top of the fiber 112 to be inspected to the top camera 102. The bottom camera 104 is preferably mounted vertically and captures the image of the bottom of the fiber to be inspected.

b1

There is preferably a hole 110 in a base plate 114 which receives the metrology unit holding the fiber to be inspected for allowing the image of the bottom of the fiber 112 to be inspected to pass to the bottom camera 104.

Please replace the paragraph bridging pages 5 and 6, starting on line 21, with the following new paragraph.

b2

As can be seen from the elevational perspective view in Figure 3b, a bottom of the base plate 114 includes a system for moving the base frame, and thus the fiber, relative to the camera(s). The base frame 404 extends through a slot 406 in the base plate 114 and is attached to a linear slide 410 on a linear motor 412. The linear motor 412 is preferably magnetically controlled for efficient small linear movements. The actual size of the movement of the linear motor 412 is determined in accordance with a desired level of detail of the inspection. The alignment pins 402 on the base frame 404 and the slot 406 in the base plate 114 ~~insure~~ ensure that the same starting point for inspection is used for each fiber. For extra quality control, an encoder slide 414 may be used with an encoder 416 to optically compare slide movements generated by the linear slide 410 with location marks on the encoder 416.

Please replace the paragraph on page 7, starting on line 11, with the following new paragraph.

The desired stability index may be objectively set based on the desired end use and required lifetime. The bend diameter to which the fiber is to be subjected typically establishes the maximum stress of the fiber. The microprocessor performs an automated pass/fail comparison of bubbles and cracks in the UV recoat to the established criteria based on the required lifetime and intended use. If the fiber fails, it may then be returned to the UV recoat stage to be recoated again and then reinspected.